What is claimed is:

1. A multiple wavelength surface-emitting laser device comprising:

a substrate; and

a plurality of surface-emitting lasers that are formed on the substrate by a continuous manufacturing process,

wherein each of said plurality of surface-emitting lasers comprises:

a bottom reflection layer on the substrate, that is doped with impurities of a first type and that is composed of alternating semiconductor material layers having different refractive indexes;

an active layer that is formed on the bottom reflection layer;

an intermediate layer that is doped with impurities of a second type on the active layer;

a top electrode that is formed on the intermediate layer to have a window through which light is emitted; and

a dielectric reflection layer where dielectric materials with different refractive indexes are alternately layered on at least one of the intermediate layer and the top electrode to a thickness suitable for a desired resonance wavelength, which is controlled by adjusting the thickness of the dielectric reflection layer.

2. The multiple wavelength surface-emitting laser of claim 1, wherein the dielectric reflection layer is composed of two different dielectric materials with different refractive indexes.

3. The multiple wavelength surface-emitting laser of claim 2, wherein the dielectric reflection layer is composed of any two dielectric materials selected from the group consisting of TiO_2, Ta_2O_5, ZrO_2, HfO, SiO_2 and MgF_2.

4. The multiple wavelength surface-emitting laser of claim 1, wherein the dielectric reflection layer is composed of any two dielectric materials selected from the group consisting of TiO_2, Ta_2O_5, ZrO_2, HfO, SiO_2 and MgF_2.

5 The multiple wavelength surface-emitting laser device of claim 1 further comprising a high resistance part that confines electric current between the active layer and the top electrode.

6. A method of manufacturing a multiple wavelength surface-emitting laser device, comprising the steps of

sequentially forming, on a prepared substrate, a bottom reflection layer, that is doped with impurities of a first type and composed of alternating semiconductor material layers having different refractive indexes, an active layer and an intermediate layer that is doped with impurities of a second type;

forming an arrangement of a plurality of surface-emitting lasers by removing the intermediate layer, the active layer and a part of the bottom reflection layer by etching;

forming, on the intermediate layer of each surface-emitting laser, a top electrode having a window through which light is emitted; and

forming, on at least one of the intermediate layer and the top electrode of each surface-emitting laser, a dielectric reflection layer where different dielectric materials are alternately layered to a thickness suitable for a desired resonance wavelength.

7. The method of manufacturing a multiple wavelength surface-emitting laser device of claim 6, wherein the dielectric reflection layer is composed of two different dielectric materials with different refractive indexes.

8. The method of manufacturing the multiple wavelength surface-emitting

laser device of claim 7, wherein the dielectric reflection layer is composed of any two dielectric materials selected from the group consisting of TiO_2, Ta_2O_5, ZrO_2, HfO, SiO_2 and MgF_2.

9. The method of manufacturing the multiple wavelength surface-emitting laser device of claim 7, wherein the dielectric reflection layer is formed by using ~~an~~ optical deposition unit.

10. The method of manufacturing the multiple wavelength surface-emitting laser of claim 6, wherein the dielectric reflection layer is composed of any two dielectric materials selected from the group consisting of TiO_2, Ta_2O_5, ZrO_2, HfO, SiO_2 and MgF_2.

11. The method of manufacturing the multiple wavelength surface-emitting laser device of claim 6, wherein the dielectric reflection layer is formed by using an optical deposition system.

12. The method of manufacturing the multiple wavelength surface-emitting laser of claim 6 further comprising a step of forming a high resistance part that confines electric current between the active layer and the top electrode.

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